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(54) Title: SMAC-PEPTIDES AS THERAPEUTICS AGAINST CANCER AND AUTOIMMUNE DISEASES

(57) Abstract: The invention is directed to the use of Smac to sensitize different tumors and self-reactive immune cells to various pro-apoptosic stimuli, in that the cells subsequently undergo apoptosis. Therefore, Smac can be used as a compound for the manufacture of a medicament for the treatment of cancer and autoimmune diseases. Sensitization of the cells is achieved either by applying a cell-permeable form of Smac combined with known anticancer agents or by overexpression of the protein. It is an object of the invention to provide a new method in cancer and autoimmune disease therapy by using Smac agonists for apoptosis regulation. Thus, Smac agonists represent novel promising cancer and autoimmune disease therapeutics to potentiate the efficacy of cytotoxic therapies even in resistant tumors and immune cells.